

Java mapping for pragmatic programmers



October 6, 2013

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Scala Edition

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Disclaimer

Disclaimer

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- Lets discuss today not implementations, but ideas staying behind them.

Agenda

1. Parser combinators
2. JAXB plugin
3. Scala Macros
4. Q&A, Discussion

XRools

- Written by Scala experts from Kiev
- XPath like DSL
- Extendable by Scala code
- XML oriented

XRools

Talk is cheap. Show me the code.

XRoos Pros

- Scala

XRoos Pros

- Scala
- Non-developers write rules

XRoos Pros

- Scala
- Non-developers write rules
- Dashboard

XRoos Cons

- Scala

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- No compile-time checks

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- Not Turing-complete

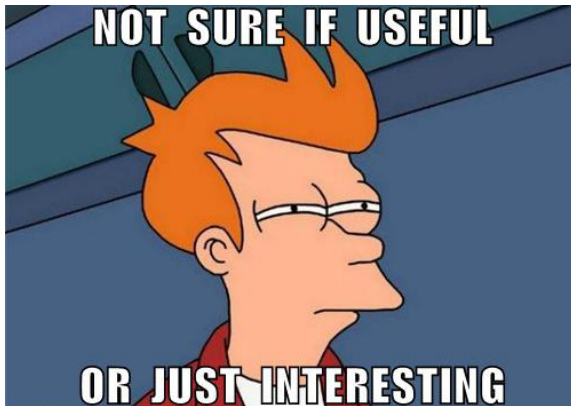
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- Non-developers write rules
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- Functions defined away from its only usage

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- No real IDE support
- Not Turing-complete
- Functions defined away from its only usage
- Debugging?

XRoles



JAXB plugin

- Written by Sergey Armensky (idea of Andrey Vytnov?)
- Plain Java (new method added for each property)
- Will be soon in production
- Have nothing to do with Scala

JAXB plugin

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JAXB plugin Pros

- Pure Java

JAXB plugin Pros

- Pure Java
- Simple and clean

JAXB plugin Pros

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- Simple and clean
- Simplify some code

JAXB plugin Cons

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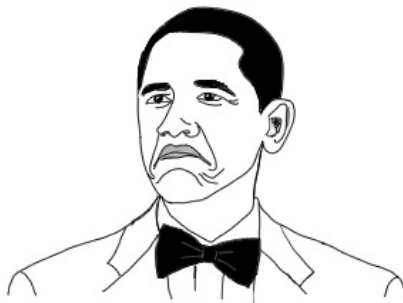
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JAXB plugin Cons

- Pure Java
- Only for JAXB generated classes
- Simplify only some code
- Not declarative enough
- Not mapper at all

JAXB Plugin



NOT BAD

Can we do better?

Can we do better?



CHALLENGE ACCEPTED

Scala related features

- Implicits of all kinds
- Point-free style
- Scala virtualized
- Macros

Yajom

- Yet Another Java Object Mapper
- Based on implicits and Scala macros
- All reflection is done in compile-time
- Easy to configure, extend or derive
(having no clue about Scala Macros at all)

Yajom

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- Compile-time bulletproof

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- IDE support
- I cannot imagine more declarative tool
- Works with any classes without any changes
- No problem with debugging

- Scala

Yajom Cons

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- Maybe not mature enough

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Yajom



<https://github.com/gark87/yajom>

Thank You!